Arthropoda Selecta 34(3): 387–395

Redescription of a monotypic genus *Arctobius* belonging to a monotypic subfamily from the northern Holarctic (Aranei: Amaurobiidae: Arctobiinae)

Переописание монотипического рода *Arctobius* из монотипического подсемейства из северной Голарктики (Aranei: Amaurobiidae: Arctobiinae)

Yuri M. Marusik[1,2,3], Mikhail M. Omelko[4,5]
Ю.М. Марусик[1,2,3], М.М. Омелько[4,5]

[1] Institute for Biological Problems of the North, Far Eastern Branch, Russian Academy of Sciences, Portovaya Str.18, Magadan 685000 Russia.
[2] Altai State University, Lenina Pr., 61, Barnaul 656049 Russia.
[3] Department of Zoology & Entomology, University of the Free State, Bloemfontein 9300, South Africa.
[4] Federal Scientific Center of East Asia Terrestrial Biodiversity, Far Eastern Branch, Russian Academy of Sciences, Vladivostok 690022 Russia.
[5] Far Eastern Federal University, Laboratory of Ecology and Evolutionary Biology of Aquatic Organisms (LEEBAO), Institute of World Ocean, Vladivostok 690091 Russia.
[1] Институт биологических проблем Севера ДВО РАН, ул. Портовая, 18, Магадан 685000 Россия.
[2] Алтайский государственный университет, пр. Ленина, 61, Барнаул 656049 Россия.
[4] Федеральный научный центр наземной биоты Восточной Азии, ДВО РАН, Владивосток 690022 Россия.
[5] Дальневосточный федеральный университет, Лаборатория экологии и эволюционной биологии водных организмов, Институт Мирового океана, Владивосток 690091 Россия.
Yuri Marusik: yurmar@mail.ru https://orcid.org/0000-0002-4499-5148
Mikhail Omelko: omelkom@gmail.com https://orcid.org/0000-0002-1556-6248

KEY WORDS: Araneae, monotypic genus, male palp structure, north Holarctic, cribellate spider.

КЛЮЧЕВЫЕ СЛОВА: Araneae, монотипический род, строение пальпы самца, северная Голарктика, кribеллятный паук.

ABSTRACT. *Amaurobius agelenoides* (Emerton, 1919), a species with almost Circumholarctic distribution is redescribed in detail. It belongs to monotypic genus *Arctobius* Lehtinen, 1967 and monotypic subfamily Arctobiinae Leech, 1972. The male palp of this species is examined thoroughly for the first time. It possesses a unique shaped embolic division not known in the RTA lineage. Brief comments on Altellopsinae Lehtinen, 1967 are provided. A distribution map based on all known records is presented.

How to cite this paper: Marusik Yu.M., Omelko M.M. 2025. Redescription of a monotypic genus *Arctobius* belonging to a monotypic subfamily from the northern Holarctic (Aranei: Amaurobiidae: Arctobiinae) // Arthropoda Selecta. Vol.34. No.3. P.387–395. doi: 10.15298/arthsel.34.3.10

РЕЗЮМЕ. *Amaurobius agelenoides* (Emerton, 1919) — вид с почти циркумголарктическим распространением подробно переописан. Он относится к монотипическому роду *Arctobius* Lehtinen, 1967 и монотипическому подсемейству Arctobiinae Leech, 1972. Пальпа самца этого вида подробно изучена впервые. Она имеет эмболюсный отдел уникальной формы, не известный у представителей RTA-клады. Даны краткие замечания по подсемейству Altellopsinae Lehtinen, 1967. Представлена карта распространения, основанная на всех известных находках.

Introduction

Arctobius Lehtinen, 1967, is a monotypic genus of the monotypic subfamily Arctobiinae Leech, 1972, occurring in the northern Holarctic. According to WSC [2025], it is distributed in "Russia (Far East), Alaska, Canada, Northern Europe". About one quarter of all distribution records of this genus lie on or above the Arctic Circle, and Arctobiinae is a single subfamily of spiders restricted to the northern Holarctic. Despite *Arctobius agelenoides* (Emerton, 1919) has been illustrated in at least nine taxonomic publications [WSC, 2025], the conformation of its copulatory organs remains almost unstudied, and its distribution is poorly documented. Beyond the regions listed in the WSC [2025] the genus is also known from the Polar Ural, Middle and South Siberia, Yakutia [Mikhailov, 2024] in Russia, Mongolia [Marusik, Logunov, 1999], the highlands of the USA, Kazakhstan, and even recorded from Mexico . The main goals of our work are to describe in detail the male palp, to provide brief comments on Altellopsinae Lehtinen, 1967 and to trace the distribution of *Arctobius agelenoides*.

Material and methods

Specimens were photographed using a Nikon DSRi2 camera attached to a Nikon SMZ25 stereomicroscope at the Far Eastern Federal University (Vladivostok, Russia). Photographs were

Figs 1–4. Habitus of male (1–2) and female (3–4) of *Arctobius agelenoides* from Finland. 1, 3 —dorsal; 2, 4 — ventral. Scale bars: 2 mm.

Рис. 1–4. Габитус самца (1–2) и самки (3–4) *Arctobius agelenoides* из Финляндии. 1, 3 —дорсально; 2, 4 — вентрально. Масштабные линейки: 2 мм.

taken in dishes filled with alcohol, with soft white paper or cotton at the bottom. Digital images were montaged using Zerene Stacker (https://zerenesystems.com/cms/stacker) software package. Epigynes were cleared in a KOH/water solution. All measurements are in millimeters. Length of leg segments were measured on the prolateral side, and are shown as: femur, patella, tibia, metatarsus, tarsus (total length). The following size classes are used after Lehtinen [1967] minute < 2 mm, small 2–4 mm, medium 4–8 mm, large 8–16 mm, and very large > 16 mm. The photo in Fig. 31 was provided by Anatoliy Ozernoi. Figures 32 and 33 are photographs obtained from iNaturalist [www.inaturalist.org] and used under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0). Full attribution is provided in the respective figure captions. All examined material is deposited in the Zoological Museum of the Moscow State University, Moscow, Russia (ZMMU; curator K.G. Mikhailov).

Abbreviations. Eyes: ALE — anterior lateral eye, AME — anterior median eye, MOA — median ocular area, PLE — posterior lateral eye, PME — posterior median eye. Leg segments: Fe — femur, Mt — metatarsus, Pa — patella, Ti — tibia. Spination: d — dorsal, p — prolateral, r — retrolateral, v — ventral.

Taxonomy

Amaurobiidae Thorell, 1869

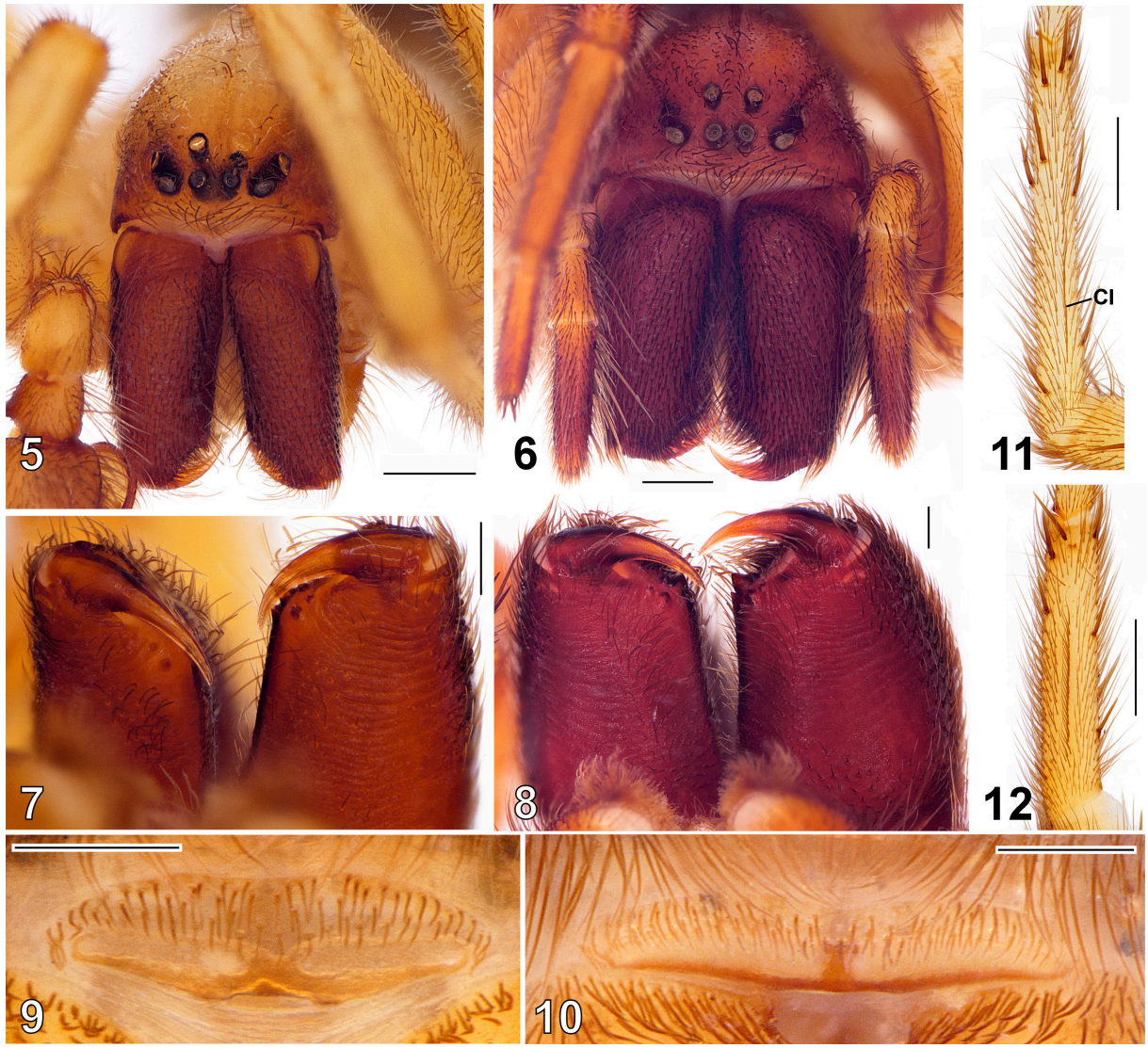
Four subfamilies are currently recognized in the family: Altellopsinae Lehtinen, 1967; Amaurobiinae Thorell, 1869; Arctobiinae Leech, 1972; and Ovtchinnikoviinae Marusik, Kovblyuk et Ponomarev, 2010 [Wheeler *et al.*, 2017; Gorneau *et al.*, 2023]. Of these, Arctobiinae and Ovtchinnikoviinae are monotypic. The type species of the type genera are well illustrated only in two subfamilies: Amaurobiinae and Ovtchinnikoviinae [Marusik *et al*., 2010].

Altellopsinae is a poorly defined group comprising ten species within five genera, all occurring in the Neotropics. Only two species are known from both sexes; the other eight are known solely from females. *Rhoicinaria rorerae* Exline, 1950 (the type species of *Rhoicinaria* Exline, 1950) is the only generotype known from both sexes, although the available figures lack details of the male palpal structure. It is worth mentioning that this genus was originally placed in Pisauridae and Agelenidae [WSC, 2025] before being transferred to Amaurobiidae by Lehtinen [1967]. This subfamily includes both cribellate and ecribellate taxa. A tegular apophysis is absent in both species of the subfamily for which males are known [Lehtinen, 1967].

Gorneau *et al*. [2023: 10] describe the distribution of Amaurobiinae as Holarctic. However, ten of the 20 genera currently placed in Amaurobiinae occur in New Zealand and Australia; two monotypic genera known only from females are found exclusively in the Neotropics (both likely misplaced), and *Taira* Lehtinen, 1967 occurs in East Asia within the Palaearctic and also extends into the Oriental realm. Although the type species of *Arctobius* has ten taxonomic entries [WSC, 2025], each accompanied by illustrations, none provides any detail structures of the male palp or epigyne.

Arctobiinae Leech, 1972

Arctobiinae Leech, 1972: 92.



Figs 5–12. Cephalic part (5–6), chelicerae (7–8), cribellum (9–10) and metatarsus IV (11–12) of *Arctobius agelenoides* male (5, 7, 9, 11) and female (6, 8, 10, 12). 5, 6 — anterior; 7–10 — ventral; 11, 12 — lateral. Scale bars: 5, 6, 11, 12 — 0.5 mm; 7, 8, 9, 10 — 0.2 mm. Abbreviations: Cl — calamistrum.

Рис. 5–12. Головная часть (5–6), хелицеры (7–8), крибеллум (9–10) и предлапка IV (11–12) *Arctobius agelenoides*: самец (5, 7, 9, 11), самка (6, 8, 10, 12). 5, 6 — спереди; 7–10 — вентрально; 11, 12 — латерально. Масштабные линейки: 5, 6, 11, 12 — 0,5 мм; 7, 8, 9, 10 — 0,2 мм. Сокращения: Cl — каламиструм.

DIAGNOSIS. This subfamily differs from Ovtchinnikoviinae by having a cribellum. It can be distinguished from *Altellopsis* Simon, 1905 by larger size (medium/large vs. small) and from all genera of Altellopsinae by divided cribellum (vs. undivided or absent). Arctobiinae differs from *Amaurobius* and related genera by the absence of a dorsal tibial apophysis (vs. a large dorsal apophysis longer than the tibia and bearing 2 or 3 branches) and the presence of an epigynal fovea (vs. entirely covered by the median plate in *Amaurobius* C.L. Koch, 1837, or absent in *Callobius* Chamberlin, 1947, *Cybaeopsis* Strand, 1907, etc.).

Arctobius Lehtinen, 1967

Arctobius Lehtinen, 1967: 215, 334.
Arctobius: Leech, 1972: 92.

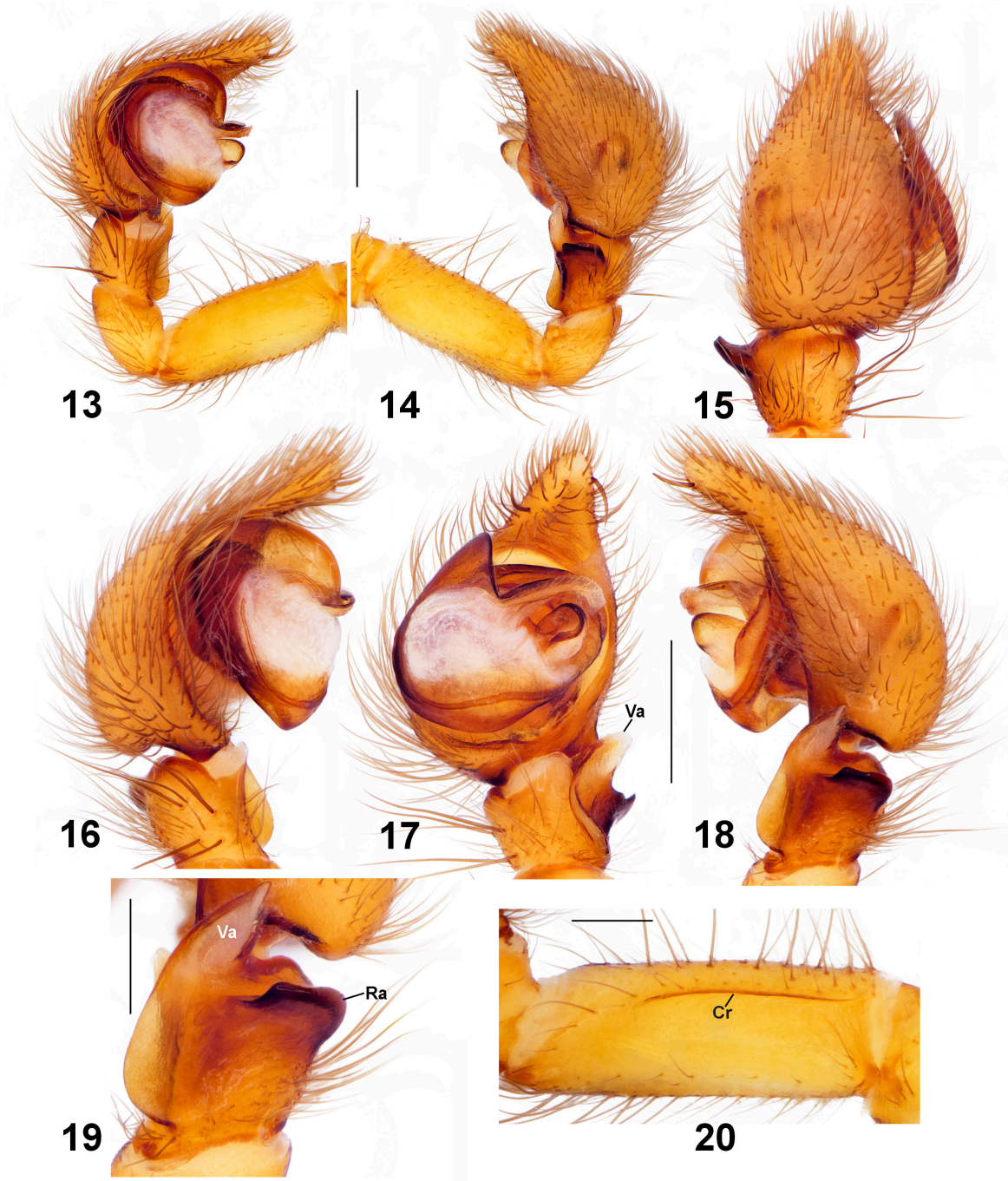
TYPE SPECIES. *Amaurobius agelenoides* (Emerton, 1919), from Alberta, Canada.

NOTE. Lehtinen [1967] placed this genus in Macrobuninae Petrunkevitch, 1928 (currently considered a separate family) and Leech [1972] described a separate subfamily for it, noting that *A. agelenoides* "is morphologically very different from all other species of amaurobiid in a Holarctic Region, and does not have any close relatives".

DIAGNOSIS. Same as for subfamily.

DESCRIPTION. Same as for species. Male has fever spines on leg I than female (see Tables 1 and 3). Leg formula in male 1423 and 4123 in female.

RELATIONSHIPS. The bulb is unique due to huge base of embolus, thin and long embolus, the presence of an additional "conductor", supporting the embolus and cannot be compared with any other bulb known to us among taxa belonging to RTA



Figs 13–20. Whole palp (13–14), terminal part of palp (15–18), palpal tibia (19) and palpal femur (20) of *Arctobius agelenoides* male. 13, 16, 20 — prolateral; 14, 18, 19 — retrolateral; 15 — dorsal; 17 — ventral. Scale bars: 13–18 — 0.5 mm; 19, 20 — 0.25 mm. Abbreviations: Cr — crest, Ra — retrolateral apophysis, Va — retroventral apophysis.

Рис. 13–20. Пальпа целиком (13–14), терминальная часть пальпы (15–18), голень пальпы (19) и бедро пальпы (20) самца *Arctobius agelenoides*. 13, 16, 20 — пролатерально; 14, 18, 19 — ретролатерально; 15—дорсально;17 — вентрально. Масштабные линейки: 13–18 — 0,5 мм; 19, 20 — 0,25 мм. Сокращения: Cr — гребень, Ra — ретролатеральный отросток, Va — ретровентральный отросток.

lineage. Male palpal tibia is somewhat similar to those in Agelenidae (Ageleninae, Coelotinae, Textricinae and Tegenariinae) which have similar crest-shaped ventral tibial apophysis, but other characters in the male palp as well as presence of a cribellum and short spinnerets, are very different.

Arctobius agelenoides (Emerton, 1919)

Figs 1–34.

Amaurobius agelenoides Emerton, 1919: 106, pl. 7, f. 7a–d (♂♀).

Hesperauximus agelenoides: Chamberlin, 1947: 18, f. 28 (♀, T from *Amaurobius*).

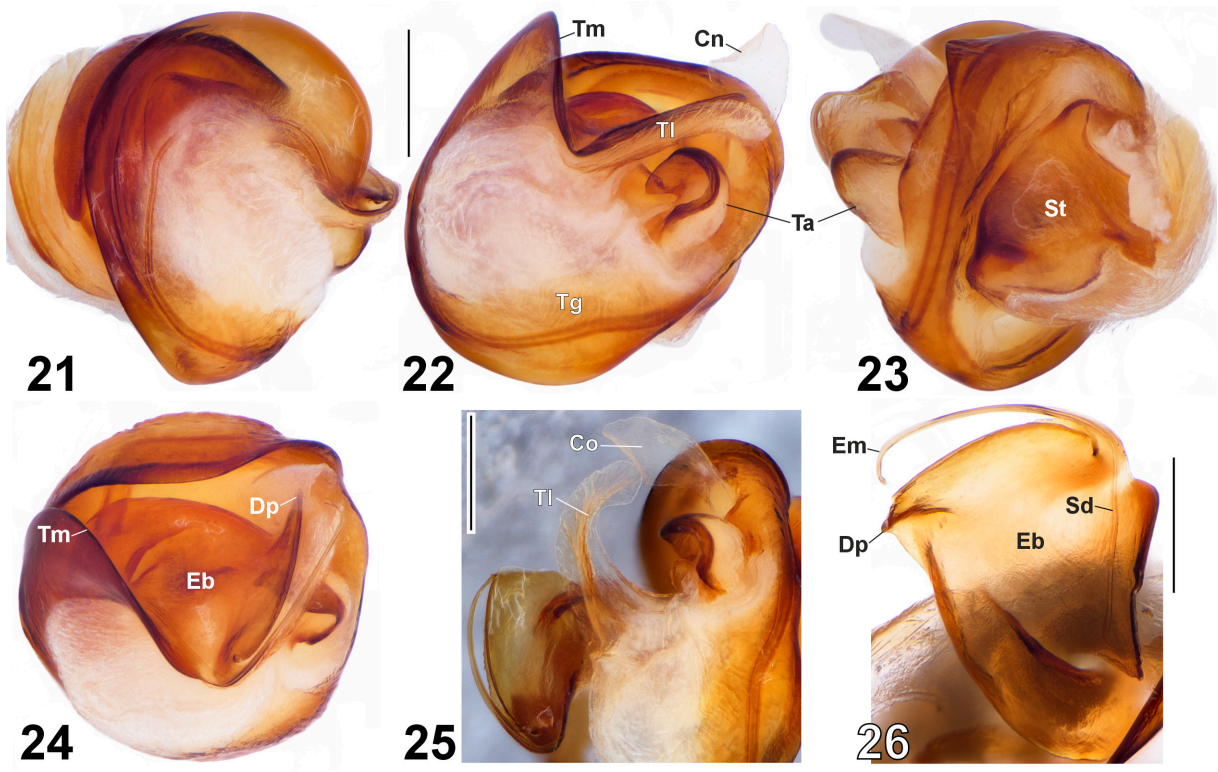
Hesperauximus agelenoides: Bishop, 1949: 104, f. 11–13 (♂).

Arctobius agelenoides: Lehtinen, 1967: 215, f. 143–147 (♂♀, T from *Ixeuticus*).

Arctobius agelenoides: Leech, 1972: 93, f. 173–176, 385–386 (♂♀).

Arctobius agelenoides: Palmgren, 1977: 25, f. 5.17–18 (♂♀).

Arctobius agelenoides: Danilov, 1994: 200, f. 2 (♀).



Figs 21–26. Bulb (21–24) and embolic division (25–26) of *Arctobius agelenoides*. 21—prolateral; 22 — ventral; 23, 25, 26 — retrolateral; 24 — anterior. Scale bars — 0.25 mm. Abbreviations: Co — conductor, Dp — dorsal process, Eb — embolic base, Em — embolus, Sd — sperm duct, Ta — tegular apophysis, St — subtegulum, Tg — tegulum, Tl — tegular lamella, Tm — tegular margin.

Рис. 21–26. Бульбус (21–24) и эмболюсный отдел (25–26) *Arctobius agelenoides*. 21 — пролатерально; 22 — вентрально; 23, 25, 26 — ретролатерально; 24 — anterior. Масштабные линейки — 0,25 мм. Сокращения: Cn — кондуктор, Dp — дорсальный отросток, Eb — основание эмболюса, Em — эмболюс, Sd — семяпровод, Ta — тегулярный отросток, St — субтегулюм, Tg — тегулюм, Tl — тегулярная ламелла, Tm — край тегулюма.

Arctobius agelenoides: Almquist, 2007: 326, f. 286a–c (♂).
Arctobius agelenoides: Tanasevitch, Kamayev, 2011: 8, f. 1–3 (♀).
Arctobius agelenoides: Marusik *et al*., 2012: 57, f. 9–11 (♂♀).

MATERIAL EXAMINED. 2♂♂ 1♀, FINLAND, Utsjoki Nuorgam: Pajuniemenpahta, 22.07.1961 (P. Lehtinen); 1♀ 3♀♀ juv., Inari, Koppelo Ukonjärvi 0.5 km W, 21.07.1961 (P. Lehtinen).

DIAGNOSIS. This species differs from other amaurobiids occurring in the North Holarctic, namely *Amaurobius* C.L. Koch, 1837, *Cybaeopsis* Strand, 1907 and *Callobius* Chamberlin, 1947 by characteristic body pattern with abdomen bearing pair of longitudinal yellow stripes along whole abdomen and dark sides (vs. long longitudinal stripes absent and sides not dark), as well as by absence of a dorsal tibial apophysis of the male palp (vs. dorsal apophysis present) and epigyne with fovea not entirely hidden by median plate and branched receptacles (vs. fovea hidden, or absent, receptacles not branched).

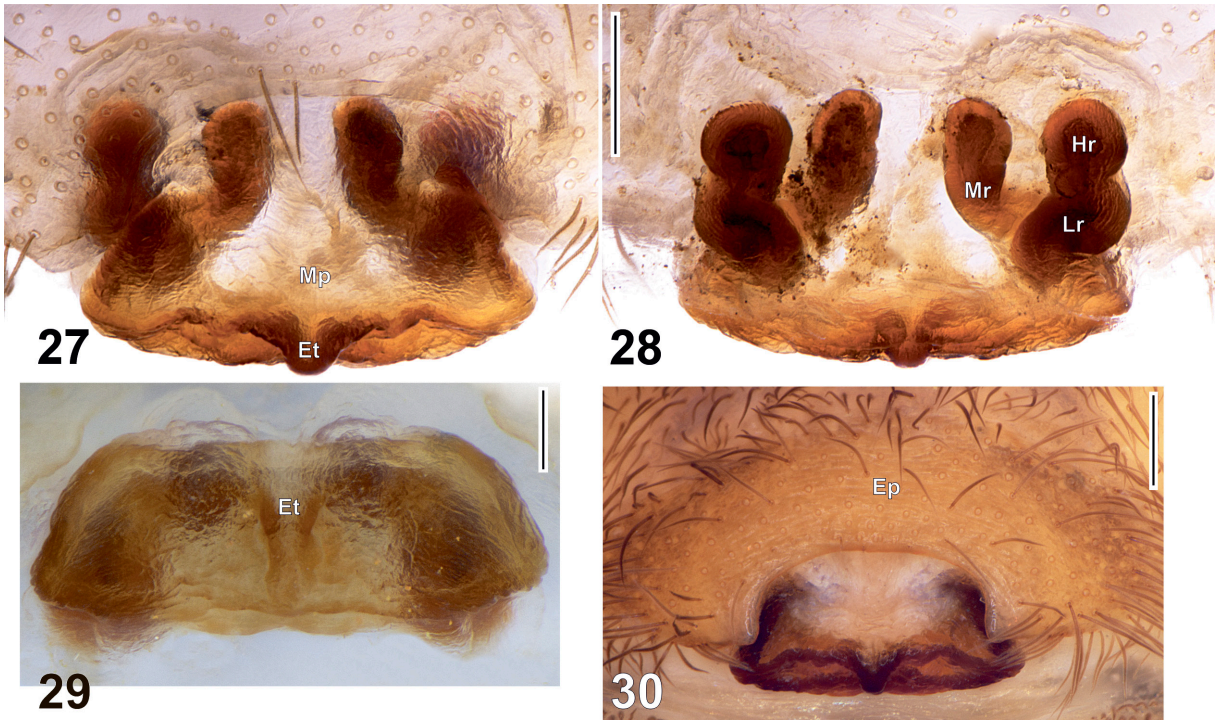
DESCRIPTION. Male (Figs 1, 2, 5, 7, 9, 11). Total length 6.47. Carapace 3.12 long, 2.00 wide. Opisthosoma 3.22 long, 2.20 wide. Carapace brown with wide yellowish lateral bands and elongated yellow spot at head area. Clypeus light brown. Eye sizes and interdistances: AME 0.09, ALE 0.14, PME 0.09, PLE 0.13; AME–AME 0.11, AME–ALE 0.06, PME–PME 0.13, PME–PLE 0.14, AME–PME 0.14, ALE–PLE 0.08. Clypeus height at AME 0.22, at ALE 0.12. Chelicerae uniformly dark brown, 2.8 times longer than wide; with 3 promarginal and 2 retromarginal teeth; inner side with transversal ridges; fang relatively short about length of chelicera width. Labium brown with yellow distal edge. Endites brown with yellow distal edge. Sternum brown. Dorsal part of opisthosoma dark gray with wide longitudinal yellow stripe and gray cardiac mark. Lateral sides of opisthosoma dark gray. Ventral part of opisthosoma brown with four longitudinal stripes consisting of irregular yellow spots. Spinnerets brown. Leg and palp measurements as in Table 2. Palps and legs light brown, without spots and rings. Leg spination as in Table 1. Cribellum (Fig. 9) bipartite, about 3 times longer than wide; calamistrum (Fig. 11) almost indistinct.

Table 1. Leg spination of male.
Таблица 1. Вооружение пальпы и ног самца.

Leg	Fe	Pa	Ti	Mt
I	–	–	2v 1a	2-2v 4a
II	–	–	1(2)p	1p 2-2v 4a
III	–	1p 1r	2p 2r 2-2v 1a	3p 3r 2-2v 4a
IV	–	1r	2p 2r 2-2v 1a	4p 2r 1-1v 4a

Table 2. Palp and legs measurements of male.
Таблица 2. Промеры пальпы и ног самца.

Leg/Palp	Fe	Pa	Ti	Mt	Cy	Total
Palp	1.00	0.47	0.37	–	1.20	3.04
I	2.08	0.94	1.74	1.78	1.14	7.68
II	1.85	0.90	1.59	1.47	0.98	6.79
III	1.74	0.90	1.31	1.47	0.87	6.29
IV	2.15	0.85	1.25	2.02	1.04	7.31



Figs 27–30. Epigyne of *Arctobius agelenoides*. 27 — macerated, ventral; 28 — ditto, dorsal; 29 — ditto, posterior; 30 — intact, ventral. Scale bars: 0.2 mm. Abbreviations: Ep — epigynal plate, Et — extension of median plate, Hr — heads of receptacles, Lr — lateral parts of receptacles, Mp — median plate, Mr — mesal parts of receptacles.

Рис. 27–30. Эпигина *Arctobius agelenoides*. 27 — мацерированная, вентрально; 28 — то же, дорсально; 29 — то же, сзади; 30 — интактная, вентрально. Масштабные линейки: 0,2 мм. Сокращения: Ep — эпигинальная пластинка, Et — вырост медиальной пластинки, Hr — головки рецептакул, Lr — латеральные части рецептакул, Mp — медиальная пластинка, Mr — медиальные части рецептакул.

Palp as shown in Figs 13–26: uniformly colored, without annulation or dark spots and distinct spines (if not count 3 spines on tip of cymbium); femur unmodified, 2.6 times longer than wide, with king of longitudinal crest (Cr) on ventral side (Fig. 20); patella unmodified, 1.5 times longer than wide; tibia 1.2 times longer than wide, with retroventral (Va) and retrolateral (Ra) apophyses; tip of ventral apophysis subtriangular in lateral view and rounded in ventral view, in ventral view with C-shaped, with crest (keel) like etxension reaching proximal part of tibia, well visible in proventral view; lateral apophysis (Ra) square shaped, wider than long; cymbium droplet shaped, ca. 1.7 times longer than wide, retro-proximally abrupt tip about 1/3 of cymbium length, with 3 weak spines; bulb about as long as wide; tegulum (Tg) with crest (keel) anterior margin (Tm, Figs 23–24) with distinct tegular apophysis (Ta) longer than wide in ventral view and as long as wide in lateral view; sperm duct (Sd) thin, not forming any loops, roundly bent around edge of tegulum; conductor (Cn) lamelliform located on distal part of tegulum; embolic division complex, with large base (Eb) carrying sharply pointed dorsal process (Dp), thin filamentous embolus proper (Em) with bent tip; membranous part of tegulum with and long and thin lamella (Tl) with median rib, as long as embolus and also bent tip, in not expanded palp embolus 'rests' on lamella (Fig. 24).

Female (Figs 3, 4, 6, 8, 10, 12). Total length 9.30. Carapace 3.65 long, 2.50 wide. Opisthosoma 5.36 long, 3.94 wide. Carapace dark brown with wide yellowish lateral bands and elongated yellow spot at head area. Clypeus brown. Eye sizes and interdistances: AME 0.14, ALE 0.15, PME 0.13, PLE 0.17; AME–AME 0.10, AME–ALE 0.06, PME–PME 0.20, PME–PLE 0.29, AME–PME 0.20, ALE–PLE 0.09. Clypeus height at AME 0.21, at ALE 0.17. Chelicerae uniformly dark brown, 2.5 times longer than wide, with 3 promarginal and 2 retromarginal teeth, and transversal ridges on inner side. Labium dark brown with yellow distal edge. Endites dark brown with yellow distal edge. Sternum brown. Dorsal part of opisthosoma dark gray with wide longitudinal yellow stripe and gray cardiac mark. Lateral sides of opisthosoma dark gray. Ventral part of opisthosoma dark brown. Spinnerets brown. Cribellum bipartite, wide and thin, 5.2 times wider than long. Leg and palp measurements as in Table 4. Palps and legs brown, without spots and rings. Leg spination as in Table 3. Calamistrum distinct and long, about 0.4 of metatarsus length.

Table 3. Leg spination of female.
Таблица 3. Вооружение пальпы и ног самки.

Leg	Fe	Pa	Ti	Mt
I	1d	–	1p 1-2v 4a	2-2v 4a
II	1d	–	2(1)p 1-2v 4a	1p 2-2v + 4a
III	–	1p 1r	2p 2r 2-1v 2a	3p 3r 2-2v + 4a
IV	–	1r	2p 2r 2-2v	3p 1r 2-1-1v + 4a

Table 4. Palp and legs measurements of female.
Таблица 4. Промеры пальпы и ног самки.

Leg	Fe	Pa	Ti	Mt	Ta	Total
Palp	1.12	0.54	0.51	–	1.07	3.24
I	2.17	1.13	1.18	1.81	1.02	7.31
II	2.01	1.06	1.48	1.31	0.98	6.84
III	1.94	0.95	1.12	1.28	0.89	6.18
IV	2.51	1.21	1.84	1.81	0.96	8.33

Figs 31–33. Web, Kazakhstan (31), living specimen *in situ*, Canada (32) and *ex situ*, Alaska (33) of *Arctobius agelenoides*. 31 — photo by Anatoliy Ozernoi; 32 — photo by Catherine Scott, iNaturalist (https://www.inaturalist.org/observations/229328739), used under CC BY-NC 4.0; 33 — photo by Hubert Szczygieł, iNaturalist. (https://www.inaturalist.org/observations/97215785), used under CC BY-NC 4.0.

Рис. 31–33. Ловчая сеть (Казахстан, 31), живой экземпляр *in situ* (Канада, 32) и *ex situ* (Аляска, 33) *Arctobius agelenoides*. 31 — фото Анатолия Озерного; 32 — фото пользователя cataranea, iNaturalist (https://www.inaturalist.org/observations/229328739), использовано по лицензии CC BY-NC 4.0; 33 — фото Hubert Szczygieł, iNaturalist (https://www.inaturalist.org/observations/97215785), использовано по лицензии CC BY-NC 4.0.

Epigyne as shown in Figs 27–30. Epigynal plate (Ep) 2 times wider than long; with distinct median plate (Mp) not covering entire fovea, anterior part, kind of stalk weakly sclerotized; median plate trapezoidal with triangle shaped extension posteriorly (Et), posterior side of median plate also trapezoidal and kind of median ridge originated from triangular extension; receptacles bifid, with lateral parts (Lr) thicker than mesal (Mr) and with distinct globular heads (Hr); mesal branches of receptacles space by diameter, and lateral branches by almost 3 diameters.

NOTES. The characteristic coloration with a longitudinal stripe on the abdomen is present even in juvenile specimens. Pattern of the carapace in alive specimens is more dark (Figs 32–33), and variable.

NATURAL HISTORY. Lehtinen [1967] mentioned that "Its web is reduced to a long tube completely enclosed by the moss layer, and the spider itself lives at the bottom of this tube." In Aborigen Field Station (NE Siberia) *Arctobius agelenoides* was rather common only in one spot in the foothill of north exposed slope with complete moss cover. Besides that it was found in litter of *Chosenia*-poplar forest and on creek's gravely shore. In Chukotka Peninsula this species lives in dwarf shrubby tundra (personal data) making small funnels and in Mongolia it was found in litter of mountain larch forest with *Aulacomnium* moss on elevation 2000 m [Marusik, Logunov, 1999]. In the southernmost locality in the Palearctic it was collected in subalpine meadow on the elevation 2650 m [A. Ozernoi, pers. comm.] where it also makes small funnels (Fig. 31). In the Nearctic it also makes small funnels (Fig. 32).

DISTRIBUTION. This species has Subcircum-Holarctic hypoarcto-boreal range and known from north Scandinavia via whole Siberia to Chukotka [Marusik *et al*., 1993] and south to Kazakhstan (ca. 43°N) and Mongolia [Marusik, Logunov, 1999]. In the Nearctic it occurs in Alaska, the western half of Canada (from south to north) and highland USA [https://www.gbif.org/species/2141213] (Fig. 34). Records of this species in lowlands of Mexico are doubtful. In Fennoscandia all records of *A. agelenoides* lie north of the Arctic Circle.

Compliance with ethical standards

CONFLICT OF INTEREST: The authors declare that they have no conflict of interest.

Ethical approval: No ethical issues were raised during our research.

Acknowledgements. The work of Mikhail M. Omelko was carried out within the state assignment of the Ministry of Science and Higher Education of the Russian Federation (theme No. 124012200183-8) using the equipment of the Laboratory of Ecology and Evolutionary Biology of Aquatic Organisms at Far Eastern Federal University. We are grateful to Anatoliy Ozernoi (Talgar, Kazakhstan) for providing a photograph of the web of *Arctobius agelenoides*, to Kirill G. Mikhailov (Moscow) for sharing information on its distribution in Russia, and to Anton A. Nadolny (Sevastopol) and an anonymous reviewer for their comments and suggestions, which improved our manuscript.

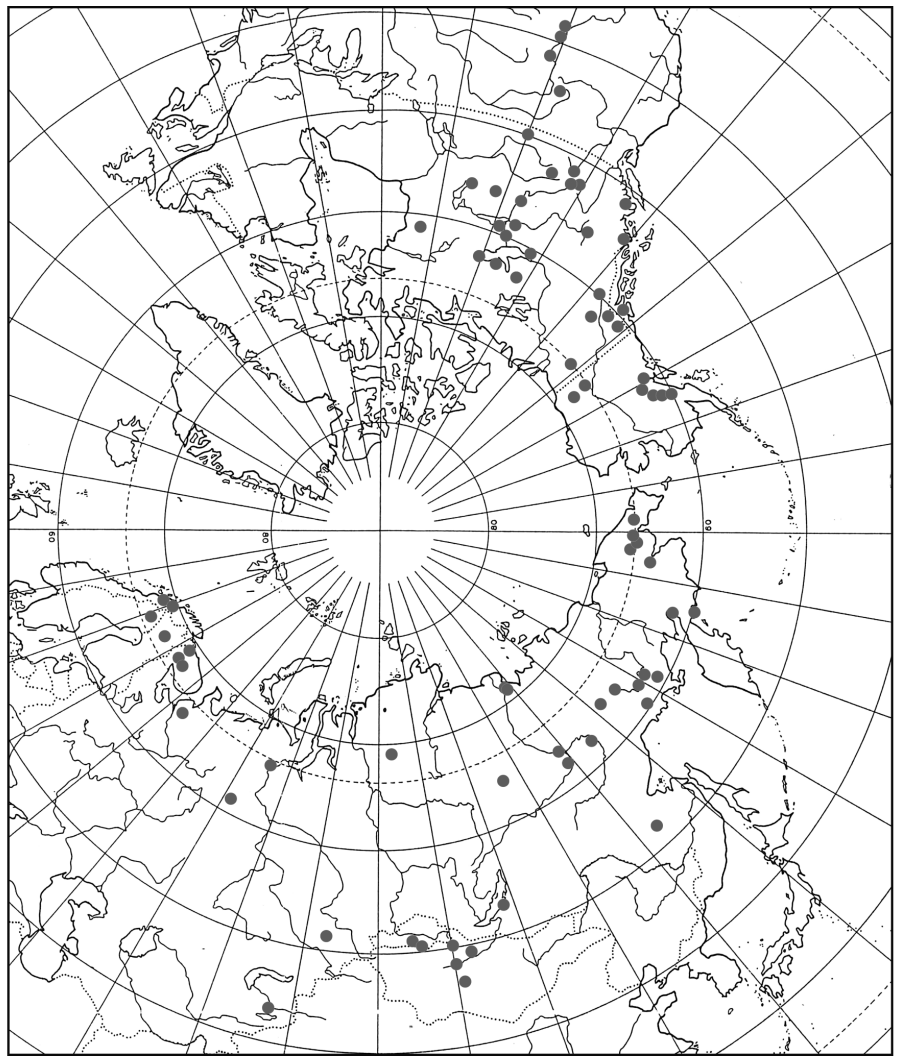


Fig. 34. Distribution records of *Arctobius agelenoides*.
Рис. 34. Карта находок *Arctobius agelenoides*.

References

Almquist S. 2007. Swedish Araneae, part 2 – families Dictynidae to Salticidae // Insect Systematics & Evolution, Supplement. Vol.63 (2006). P.285–601.

Bishop S.C. 1949. Spiders of the Nueltin Lake Expedition, Keewatin, 1947 // Canadian Entomologist. Vol.81. No.4. P.101–104. https://doi.org/10.4039/Ent81101-4

Chamberlin R.V. 1947. A summary of the known North American Amaurobiidae // Bulletin of the University of Utah. Vol.38. No.8. P.1–31.

Danilov S.N. 1994. [Cribellate spiders (Aranei, Cribellatae) of Transbaicalia] // Entomologicheskoe Obozrenie. Vol.73. P.200–209 [in Russian].

Emerton J.H. 1919. New spiders from Canada and the adjoining states, No. 2 // Canadian Entomologist. Vol.51. No.5. P.105–108, pl. 7. https://doi.org/10.4039/Ent51105-5

Gorneau J.A., Crews S.C., Cala-Riquelme F., Montana K.O., Spagna J.C., Ballarin F., Almeida-Silva L.M., Esposito L.A. 2023. Webs of intrigue: museum genomics elucidate relationships of the marronoid spider clade (Araneae) // Insect Systematics and Diversity. Vol.7. No.5(5). P.1–18. https://doi.org/10.1093/isd/ixad021

Leech R.E. 1972. A revision of the Nearctic Amaurobiidae (Arachnida: Araneida) // Memoirs of the Entomological Society of Canada. Vol.84. P.1–182.

Lehtinen P.T. 1967. Classification of the cribellate spiders and some allied families, with notes on the evolution of the suborder Araneomorpha // Annales Zoologici Fennici. Vol.4. No.3. P.199–468.

Marusik Yu.M., Ballarin F., Omelko M.M. 2012. On the spider genus *Amaurobius* (Araneae, Amaurobiidae) in India and Nepal // ZooKeys. Vol.168. P.55–64. https://doi.org/10.3897/zookeys.168.2352

Marusik Yu.M., Kovblyuk M.M., Ponomarev A.V. 2010. A new subfamily of amaurobiid spiders (Aranei: Amaurobiidae) from west Caucasus // Arthropoda Selecta. Vol.19. No.4. P.227–236. https://doi.org/10.15298/arthsel.19.4.03

Marusik Yu.M., Logunov D.V. 1999. On the spiders (Aranei) collected in central Mongolia during a joint American-Mongolian-Russian expedition in 1997 // Arthropoda Selecta. Vol.7. No.2. P.233–254.

Marusik Yu.M., Eskov K.Yu., Koponen S., Vinokurov N.N. 1993. A check-list of the spiders (Aranei) of Yakutia, Siberia // Arthropoda Selecta. Vol.2. No.2: 63–79

Mikhailov K.G. 2024. Checklist of spiders (Arachnida: Aranei) of Russia and neighbouring countries (as of 2022) // Arthropoda Selecta. Moscow. Suppl. No.7. 311 p.

Palmgren P. 1977. Die Spinnenfauna Finnlands und Ostfennoskandiens. VIII. Argyronetidae, Agelenidae, Hahniidae, Dictynidae, Amaurobiidae, Titanoecidae, Segestriidae, Pholcidae und Sicariidae // Fauna Fennica. Bd.30. S.1–50.

Tanasevitch A.V., Kamayev I.O. 2011. Spiders of Kola Peninsula, Russia (Arachnida: Aranei) // Caucasian Entomological Bulletin. Vol.7. No.1. P.7–32.

Wheeler W.C., Coddington J.A., Crowley L.M., Dimitrov D., Goloboff P.A., Griswold C.E., Hormiga G., Prendini L., Ramírez M.J., Sierwald P., Almeida-Silva L.M., Álvarez-Padilla F., Arnedo M.A., Benavides L.R., Benjamin S.P., Bond J.E., Grismado C.J., Hasan E., Hedin M., Izquierdo M.A., Labarque F.M., Ledford J., Lopardo L., Maddison W.P., Miller J.A., Piacentini L.N., Platnick N.I., Polotow D., Silva-Dávila D., Scharff N., Szűts T., Ubick D., Vink C., Wood H.M., Zhang J.X. 2017. The spider tree of life: phylogeny of Araneae based on target-gene analyses from an extensive taxon sampling // Cladistics. Vol.33. No.6. P.576–616. https://doi.org/10.1111/cla.12182

WSC. 2025. World Spider Catalog. Version 26. Natural History Museum Bern, Bern. Available from: http://wsc.nmbe.ch [Accessed 18 Jul. 2025]. https://doi.org/10.24436/2

Responsible editor K.G. Mikhailov